

## PROJECT 1 – NEW CONSTRUCTION OF FIRE STATION #8

### A. Project Description

The Cincinnati Fire Department requests funding for the construction of a replacement to Fire Station #8. The structure does not accommodate the essentials necessary to meet current operational needs. The current station presents safety hazards to the firefighters and residents. Fire Station #8 houses Engine Company #8. This is a paramedic engine company staffed with at least one paramedic and provides Advanced Life Support (ALS).

The following will provide information regarding the existing structure:

- Built in 1931
- 1 apparatus bay
- 2 stories high
- 6,888 square feet

In 1996, the City of Cincinnati's Facility Management Division (CFM) inspected all fire stations and graded each station for features such as location and building conditions. CFM gave Fire Station #8 a grade of 3.3 points out of a possible 10 points. In 2001, a study was conducted by Cole + Russell Architects on all Cincinnati Fire Stations. The study was to assess the current state of each building, providing recommended repairs and/or recommended new construction. The results of this study mirrored the 1996 findings. Cole + Russell Architects concluded that out of all 26 fire stations operated by the CFD that Fire Station #8 was by far in the poorest shape – presenting health and safety concerns to the firefighters living and working in the building.

The following will provide information regarding Fire Station #8's safety hazards and deficiencies:

- Does not meet NFPA Standard 1581:

Fire Station #8 has been documented as having a significant problem with pests – such as infestations of roaches, ants, mice, rats, raccoons, including a bout of bed bugs. While the Cincinnati Fire Department works hard to mitigate these issues, it still presents a problem to the firefighters living and working in the station 24 hours a day/7 days a week

- Does not meet NFPA Standard 1500 - Standard on Fire Department Occupational Safety & Health Program, under 9.1.1. – all fire department facilities shall comply with all legally applicable health, safety, building, and fire code requirements

- o Building does not meet current International Code Council (ICC) requirements

- Lacks fire separation

- Structure has wooden rafters

- Second floor contains all wood components

- Lacks sprinkler systems

- Lacks smoke/carbon monoxide detection system

- o Building does not meet the American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE)

- Lacks packaged air system. Currently uses window units/forced air cooling

- Lacks gender separated facilities

- Structural Issues – vertical crack that extends the entire height of the building

- Mold is also present in the walls and on the ceiling of the facility

- Electrical fixtures are located in shower stall

- Uneven step on bottom of staircase

- Lack of security system

- Located on busy thoroughfare at an intersection, presenting a stacking problem which hinders the flow of traffic
- Location hinders safe egress into and out of building
- Egress hampered by lack of drive-thru
- Only has 1 apparatus bay the clearance of the door is too small for modern equipment
- There is inadequate parking, which cannot accommodate shift change or parking for citizens
- The current station cannot support emergency medical response equipment or other functions of a modern department, to meet the changing demographics of the area

The CFD is requesting funds to build a new station as opposed to expanding or modifying the existing station because of space constraints on the lot. The proposed site meets zoning requirements and has utilities available.

The proposed structure will eliminate all of the previously mentioned hazards and deficiencies, as well as, expand components of the existing structure. It will be built to meet all applicable code requirements. In addition, it will be designed as a gateway/community anchor of the redevelopment of this 1890's neighborhood.

The following will provide a comparison between the existing and proposed fire stations.

Feature	Current Fire Station #8	Proposed Fire Station #8
Apparatus Bay	1 bay without drive-thru	
	1,401 Sq. Ft.	3 bays with drive thru
	4,661 Sq. Ft.	
Gender Separated Facilities	No	Yes
Security System	No – locks on doors only	Yes
Dormitory	770 Sq. Ft.	1,040 Sq. Ft.
Training Area	None	288 Sq. Ft.
Decon Area	A sink in apparatus bay, no designated room	102 Sq. Ft.
Fitness Room	Space in basement, no designated room	320 Sq. Ft.
Day Room	None	397 Sq. Ft.
Other Areas (kitchen, locker room, laundry room etc.)		6,118 Sq. Ft.
Total Square Feet	6,888 Sq. Ft.	12,026 Sq. Ft.

The property for the new Fire Station #8 is located on Montgomery Road and owned by a private club. The location is adjacent to the current Fire Station. The City has completed appraisals of the land, received right of entry to perform all soil and environmental testing, informed the community, and has made an offer to purchase. The current offer is being reviewed by their lawyers and board of directors. A response or counter offer is expected shortly. The funding to purchase this land is in the City's capital budget now, and once the owner responds – the City will proceed with purchase. The design process for this new station has begun with the hiring of an architect/engineering team which again is funded in the current budget. Programming and initial design concepts will be produced prior to the finalization of the property acquisition.

Expenditures to date total \$10,000 for soil studies and real estate assessment costs.

## B. Financial Need

The City of Cincinnati's short-term and long-term financial projections paint a grim picture for employees and residents of the city. The City of Cincinnati's Finance Department, in conjunction with the University of Cincinnati's Economic Research Department, are projecting a 2010 deficit of \$40M. Through May 2009, actual General Fund revenue is \$11.6M under the amount forecasted. Declining income tax collections contribute \$7.5M to this unfavorable variance. Updated projections for 2009 estimate that the total 2009 income tax collections, which comprise over 66% of the General Fund budget, will fall short of the forecast by \$15.4M. For these reasons, City Council is mandating a 5% budget reduction for all city departments. In addition, effective July 1, 2009, the city suspended holiday pay for all non-represented employees and is requesting financial concessions from all collective bargaining units. In a June 15, 2009 budget message, City Manager Milton Dohoney Jr. stated, "...I am asking all employees paid for from the General Fund to participate in the sacrifices that must be made in order for us to stabilize our budget." The city may need to take additional steps which would include the reduction and elimination of various city services.

The City Facility Management Division (CFM) manages the replacement and renovation of all general fund city facilities which includes fire stations. Funding in the City Facility Replacements Fund and City Facility Renovations Fund provide the resources for the replacement and renovation of 80 general fund facilities and four (4) historic buildings. Over 50% of these facilities exceed 50 years old with 20% of these exceeding 100 years old.

CFM's City Facility Replacement Fund has experienced a 33 % reduction in funding from 2007 to 2009. Construction costs have fluctuated up and down over this same time period adding to the funding dilemma. At the current funding level of \$1.9M, it will take almost three (3) years to fund the replacement of one (1) fire station. This calculation does not take into account escalating construction costs or the replacement needs of other General Fund facilities. CFM estimates the replacement cost of all General Fund facilities to exceed \$298M.

The 2009 City Facility Renovation Fund is \$2.9M. CFM estimates short-term renovation needs in excess of \$22M and future needs changing as the buildings continue to age.

The Cincinnati Fire Department's (CFD) 2009 operating budget is \$73.5M, of which approximately 89%, or \$65M, funds employee's salaries and wages. The remaining \$9M is budgeted for materials/supplies, contract services and lease payments. This portion of the operating budget funds the repair and maintenance off all fire stations. The 2009 budget for Building and Equipment Repair totals \$64K. This amount only provides funding for the most critical repairs such as apparatus doors and replacement/repair of appliances.

The projects have been part of the City's Capital Improvements Plans dating back to at least 1996. While it is a priority within the Department – it falls short to the many projects the City of Cincinnati has prioritized over its definite need.

The CFD pursues all available funding sources. In 2007 the CFD hired a Grants Administrator who is responsible for researching and submitting applications for all grant opportunities. The

majority of grant funding is for Homeland Security and focuses on equipment and training for response to a non-conventional weapon attack.

The CFD has declined requesting grants due to lack of matching funds. An example is the Staffing for Adequate Fire and Emergency Response (SAFER) grants. Due to fiscal reasons, the CFD has not applied for this grant since the inception of this program. The CFD intends to apply for the most recent grant opportunity for FY2009 if a match is not required. Funding from the grant could fund the salaries of firefighters if layoffs occur.

The CFD requests an award from the Federal government because the city and the Department do not have the money needed to fund these projects completely. The Cincinnati Fire Department is already run on a shoestring budget, expending 89% of its operating budget on salaries and wages alone. The City's poor economic growth and reduction of their total budget, impacts and reduces dollars needed for necessary services throughout the City. If monies are reallocated to urgent projects, other pressing matters are impacted. It's crucial to receive outside alternative revenue sources to help fill the dangerous gaps assumed by the CFD. The CFD is actively pursuing other grant sources to fund the various needs within the Department. They've done this through a series of grant applications at the Federal, State and local level. However, the daily harm bestowed to the personnel and clients is an immediate and pressing need, with hopes to be funded through this application. There is also a limited amount of grant sources to seek funding for such requests, which is why it's crucial to receive this funding through the Department of Homeland Security's Federal Emergency Management Agency (FEMA) – who have allotted specific dollars to such priorities.

According to the Ohio Department of Job and Family Services, Ohio's current jobless rate as of April of 2009 has jumped to 10.2%, up from 9.7% in March and up from 6.2% a year earlier. Recurring loss in both manufacturing and construction, along with additional losses in the service providing industries, attributed to the unemployment rate increasing in Ohio. The number of workers unemployed in Ohio in April was 608,000, up from 578,000 in March. The number of unemployed has increased by 235,000 in the past 12 months from 373,000. In Hamilton County, the area jobless rate was 8.4%, up from 8.2% the month before and 4.6% the year before. The city of Cincinnati also notched an 8.4% rate, up from 8.3% and 4.9%, respectively. (Ohio Dept. of Job and Family Services Press Release  
<http://jfs.ohio.gov/RELEASES/unemp/200905/UnempPressRelease.asp>)

### C. Cost/Benefit

The new building would help with response capabilities. At this time, the Fire Department is not able to expand its service by adding an additional engine company or transport unit, due to the facility only having one bay. The new fire station #8 will be designed and built according to the most recently approved requirements and codes developed by the International Code Council, as well as up to NFPA Standards that involve fire station construction; including sprinkler systems (in accordance with NFPA 1: Standard on Fire Code, chapter 13); fire alarms and vehicle exhaust extraction systems (in accordance with NFPA 1500: Standard on Fire Department Occupational Safety & Health Program, chapter 9).

The estimated project costs are \$5M. There is no teardown required. It's also estimated that the

construction of the new fire station would employ approximately 75 people. The estimated timeframe is 181 days or more.

All new construction and modifications will be designed and built to the latest LEED new construction standards published in 2009, the guidelines of the National Fire Chief's Association and the Guiding Principles for Sustainable New Construction and Renovations, as required in Executive Order 13423. The City of Cincinnati strives to attain a gold certification for each renovation and construction project.

#### D. Effect on Daily Operations

In 2008, Fire Station #8 responded to approximately 133 fires and 1,280 EMS runs; compared to 2007 totals of 106 fires and 1,350 EMS runs. The community relies heavily on the Cincinnati Fire Department. The presence of a station near its current location is key for area response. The flexibility to add or move companies to this location will improve response time and capabilities.

Fire Station #8 will continue to be available for mutual aid to the surrounding communities. These communities include, but are not limited to the following; Norwood, Golf Manor, Silverton, Deer Park and Amberly Village.

### PROJECT 2 – NEW CONSTRUCTION OF FIRE STATION #35

#### A. Project Description

The Cincinnati Fire Department requests funding for the construction of a new Fire Station #35. The current station does not meet ADA and other code requirements nor does it accommodate the essentials necessary to meet current operational needs.

Fire Station #35 houses Engine Company 35. This is a paramedic engine company staffed with at least one paramedic and provides Advanced Life Support (ALS).

The following will provide information regarding the existing structure:

- Built in 1907
- 1 apparatus bay
- 2 stories high
- 6,850 square feet

In 1996, the City of Cincinnati's Facility Management Division (CFM) inspected all fire stations and graded each station for features such as location and building conditions. CFM gave Fire Station #35 a grade of 4.2 points out of a possible 10 points. In 2001, a study was conducted by Cole + Russell Architects on all Cincinnati Fire Stations. The study was to assess the current state of each building, providing recommended repairs and/or recommended new construction.

The following will provide information regarding Fire Station #35's safety hazards and deficiencies:

- Does not meet NFPA Standard 1500 - Standard on Fire Department Occupational Safety & Health Program, under 9.1.1. – all fire department facilities shall comply with all legally applicable health, safety, building, and fire code requirements
  - o Building does not meet current International Code Council (ICC) requirements
  - Lacks sprinkler systems
  - Lacks smoke/carbon monoxide detection system

- o Building does not meet the American Society of Heating, Refrigeration and Air Conditioning

Engineers (ASHRAE)

&#1607; Lacks packaged air system. Currently uses window units/forced air cooling

- Lacks gender separated facilities
- Lack of security system
- Egress hampered by lack of drive-thru
- Only has 1 apparatus bay
- There is inadequate parking which cannot accommodate shift change or parking for citizens
- The current station cannot support emergency medical response equipment or other functions of a modern department, to meet the changing demographics of the area

The CFD is requesting funds to build a new station as opposed to expanding or modifying the existing station because of space constraints on the current lot.

The proposed structure will eliminate all of the previously mentioned hazards and deficiencies, as well as, expand components of the existing structure.

The following will provide a comparison between the existing and proposed fire stations.

Feature Current Fire Station #35 Proposed Fire Station #35

Apparatus Bay 1 bay without drive-thru

1035 sf 3 bays with drive thru

4,661 Sq. Ft.

Gender Separated Facilities No Yes

Security System No – locks on doors only Yes

Dormitory 594 Sq. Ft. 1,040 Sq. Ft.

Training Area 0 288 Sq. Ft.

Decon Area 20' in app bay 102 Sq. Ft.

Fitness Room 189 Sq. Ft 320 Sq. Ft.

Day Room 189 Sq. Ft 397 Sq. Ft.

Other Areas (kitchen, locker room, laundry room etc.) 4,843 Sq. Ft 5,218 Sq. Ft.

Total Square Feet 6,850 Sq. Ft. 12,026 Sq. Ft.

The property for the new Fire Station #35 is currently being scouted by city officials. They have their options narrowed down to three (3) locations. Each property is zoned for business purposes and has utilities available. The City of Cincinnati has not incurred any expenditure to date.

B. Financial Need – See Project 1

C. Cost/Benefit

The new fire station #35 will be designed and built according to the most recently approved requirements and codes developed by the International Code Council, as well as up to NFPA Standards that involve fire station construction; including sprinkler systems (in accordance with NFPA 1: Standard on Fire Code, chapter 13); fire alarms and vehicle exhaust extraction systems (in accordance with NFPA 1500: Standard on Fire Department Occupational Safety & Health Program, chapter 9).

The estimated project costs are \$5M. There is no teardown required. It's also estimated that the

construction of the new fire station would employ approximately 75 people. The estimated timeframe is 181 days or more.

All new construction and modifications will be designed and built to the latest LEED new construction standards published in 2009, the guidelines of the National Fire Chief's Association and the Guiding Principles for Sustainable New Construction and Renovations, as required in Executive Order 13423. The City of Cincinnati strives to attain a gold certification for each renovation and construction project.

#### D. Effect on Daily Operations

In 2008, Fire Station #8 responded to approximately 133 fires and 1,280 EMS runs; compared to 2007 totals of 106 fires and 1,350 EMS runs. The community relies heavily on the Cincinnati Fire Department.

The new building would help with response capabilities. At this time, the Fire Department is not able to expand its service by adding an additional engine company or transport unit, due to the facility only having one bay. Two (2) of the three (3) potential locations will improve response time for several response measures. For example, the First Paramedic Dispatched to the scene of an Advanced Life Support call will be reduced from 6:14 minutes to 5:49 minutes. The First Engine Dispatched to the scene of a fire will be reduced from 4:34 minutes to 4:24 minutes. This information is provided by Deccan International's 1710 Analyst Software. Also the flexibility to add or move companies to this location will improve response time and capabilities.

Fire Station #35 will continue to be available to provide mutual aid to Green Township and the City of Cheviot.

### PROJECT 3 – RENOVATION OF FIRE STATION #29

#### A. Project Description

The Cincinnati Fire Department requests funding for the renovation of Fire Station #29. The structure does not meet today's code requirements including ventilation standards and ADA accessibility issues. The facility needs to be updated to make it energy efficient by means of replacing the current HVAC system and light fixtures. Additionally, the facility needs to be updated to meet current operational needs of its occupants.

Fire Station #29 houses Engine 29, Ladder 29 and Ambulance 29 (Basic Life Support). This station is also the central location for the Fire Training College.

The following will provide information regarding the existing structure:

- Built in 1939
- 3 apparatus bays
- 3 stories high
- 18,752 square feet

In 2001, a study was conducted by Cole + Russell Architects on all Cincinnati Fire Stations. The study was to assess the current state of each building, providing recommended repairs and/or recommended new construction. Fire Station #29's most pressing modification needs are a new addition to add female firefighter's facilities and installation of a security system.

Fire Station #29's most pressing modification issues and needs that will be addressed in this

renovation are as follows:

- Lacks gender separated facilities
- Lacks security system
- HVAC system needs replacement.

Fire Station #29 was built in the 1930's and since then the house has undergone major changes to operations and there have been many changes to building codes. For example, the house was not built to house female fire fighters or to any kind of energy efficient or ADA standards. For this reason, most fire stations of this era do not have the flexibility to accommodate gender separated facilities. Currently, female fighters are required to shower and dress in a small restroom located in the unfinished and dank basement. Current arrangements do not provide gender separated sleeping quarters. This renovation will make the female facilities comparable to the male facilities. It includes construction of adjoining restrooms and locker room. The current dormitory will be restructured with sleeping cubicles for either men or women to use. Additionally, all plumbing will be replaced and the male's restroom relocated to accommodate the addition of the female facilities. The restroom additions/modifications will bring this station in compliance with ADA standards.

Since 9/11, the security of fire stations is of paramount concern for the health and safety of the public. In addition, the stock of controlled substances and maintenance of expensive equipment make the fire stations ripe for burglary.

Fire Station #29 lacks a security system. This renovation will include the cost of installation of a security system which will include at least one (1) security camera and two (2) additional swipe cards. The City of Cincinnati is in the process of installing a security system at another facility which has a central hub with the capacity of adding additional card readers at other locations.

This renovation will include a new HVAC system which will increase the indoor environmental air quality to LEED standards. The current HVAC system has exceeded its useful life and is inefficient and ineffective. Additionally, the lighting throughout the building needs to be replaced with more efficient light. New service needs to be brought into the building for the new mechanical equipment which will also require new panel boards and a new switchboard.

Expenditures to date total \$103,000 for design costs.

B. Financial Need – See Project 1

C. Cost/Benefit

The installation of a new HVAC system, mechanical system and light fixtures will reduce energy costs by replacing the old ineffective and inefficient systems.

The CFD is requesting funds to modify the existing station. The estimated project costs are: \$1,725,000. The city of Cincinnati has \$225,000 to contribute to the project. It's also estimated that the modifications to the fire station would employ approximately 30 people. The estimated timeframe is 181 days or more.

The City of Cincinnati strives to meet LEED standards if possible in our renovation projects. At Fire Station #29, the City will use LEED as a guide since attempting certification is not



economically feasible with this project. The building will remain occupied during the course of this project which hinders the ability to install LEED compliant options.

#### D. Effect on Daily Operations

In 2008, Fire Station #29 responded to approximately 447 fires and 2,295 EMS runs; compared to 2007 totals of 506 fires and 2,176 EMS runs. The community relies heavily on the Cincinnati Fire Department.

The CFD will continue to be available for mutual aid to locations in Northern Kentucky.

### PROJECT 4 – RENOVATION OF FIRE STATION #24

#### A. Project Description

The Cincinnati Fire Department requests funding for the renovation of Fire Station #24. The facility needs to be updated to meet the current operational needs of its occupants.

Additionally, the facility does not meet today's code requirements including ventilation and ADA accessibility standards.

Fire Station #24 houses Engine Company 24, Ladder Company 24 and Rescue 24 (Advanced Life Support).

The following will provide information regarding the existing structure:

- Built in 1939
- 3 apparatus bays
- 2 stories high
- 8,526 square feet

In 1996, the City of Cincinnati's Facility Management Division (CFM) inspected all of the City's fire stations and graded each station for features such as location and building conditions. CFM gave Fire Station #24 a grade of 3.3 points out of a possible 10 points. In 2001, a study was conducted by Cole + Russell Architects on all Cincinnati Fire Stations. The study was to assess the current state of each building, providing recommended repairs and/or recommended new construction.

The following will detail the hazards and deficiencies found at Fire Station #24:

- Lacks gender separated facilities
- Lacks security system
- Building mechanics do not meet current code requirements-some violate NFPA Standard 1500

The proposed structure will eliminate all of the previously mentioned hazards and deficiencies, as well as, expand components of the existing structure.

Fire Station #24 was built in the 1930's and since then the house has undergone major changes to operations and there have been many changes to building codes. For example, the house was not built to house female fire fighters. This renovation will allow for new female facilities comparable to the male facilities. It includes construction of adjoining restrooms and a locker room. The current dormitory will be restructured with sleeping cubicles for either men or women to use.

Fire Station #24 lacks a security system. Since 9/11, the security of fire stations is of paramount

concern for the health and safety of the public. In addition, the stock of controlled substances and maintenance of expensive equipment make the fire stations ripe for burglary. This renovation will include the cost of installation of a security system which will include at least one (1) security camera and two (2) additional swipe cards. The City of Cincinnati is in the process of installing a security system at another facility which has a central hub with the capacity of adding additional card readers at other locations.

Fire Station #24 does not meet NFPA Standard 1500 - Standard on Fire Department Occupational Safety & Health Program, under 9.1.1. – All fire department facilities shall comply with all legally applicable health, safety, building, and fire code requirements. This building does not meet these standards because it does not meet the American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE). If we receive funding, the current HVAC system will be replaced. Additionally, the lighting throughout the building needs to be replaced with more efficient light fixtures, the fire alarm system will be replaced, new electric service will be brought into the building for the new mechanical equipment which will also require new panel boards and a new switchboard.

The city recently purchased the existing property to the west of Fire Station #24 for the expansion of the building. Expenditures to date total \$170,000 for design and \$100,000 for property, demolition and an environmental assessment.

B. Financial Need- See Project 1

C. Cost/Benefit

The estimated project costs are \$1,725,000. There is no teardown required. It's also estimated that the construction of the new fire station would employ approximately 50 people. The estimated timeframe is 181 days or more.

This project will bring the entire mechanical system up-to-date which will improve the health and welfare of the building's occupants.

The City of Cincinnati strives to meet LEED standards if possible in our renovation projects. At Fire Station 24, the City will use LEED as a guide since attempting certification is not economically feasible with this project. The building will remain occupied during the course of this project which hinders the ability to install LEED compliant options.

D. Effect on Daily Operations

In 2008, Fire Station #24 responded to approximately 390 fires and 8,895 EMS runs; compared to 2007 totals of 385 fires and 9,175 EMS runs. The community relies heavily on the Cincinnati Fire Department.

Fire Station #24 will continue to be available for mutual aid to Green Township, Delhi Township and the City of Cheviot.

## PROJECT 5 – RENOVATION OF FIRE STATION #14

A. Project Description

The Cincinnati Fire Department requests funding for the renovation of Fire Station #14. The

facility needs to be updated to meet current operational needs of its occupants.

The structure does not meet today's code requirements including ventilation standards and ADA accessibility issues. The facility needs to be updated to make it energy efficient by means of insulating the exterior walls and replacing existing single pane windows. We propose to have the facility LEED certified in order to meet today's sustainability goals.

Fire Station #14 houses the Explosive Ordnance Device Unit (EOD) which also couples as Engine 14, Hazardous Materials Unit (Squad 14), Rescue 14 (Advanced Life Support) and Administrative Offices. A total of 40 firefighters are assigned to this station and 18 sworn and civilian employees work in the Administrative Offices. The sworn strength includes the Fire Chief and four (4) Assistant Chiefs.

The following will provide information regarding the existing structure:

- Built in 1962
- 5 Apparatus bays
- 2 stories high
- 35,757 square feet

In 2001, a study was conducted by Cole + Russell Architects on all Cincinnati Fire Stations. The study assessed the current condition of each building, providing recommended repairs and/or recommended new construction. Fire Station #14's most pressing modification issues and needs that will be addressed in this renovation are as follows:

- Building mechanics do not meet current code requirements - many violate NFPA Standard 1500
  - o HVAC
  - o Windows
  - o Lack of insulation
  - o Electrical System
- Is not ADA compliant
- Lack of gender separated facilities
- Lack of Security System for portion of building

The entire structure is not sustainable and does not meet LEED standards. Currently, a chiller system cools the air which is inefficient and does not provide proper ventilation to occupants. It is common place for the administrative offices on the second floor to have soot and various air borne debris from the apparatus floor. In addition, various areas rely on window air units for additional cooling. There are a total of 5 window units currently in use. This renovation will include a new HVAC system which will increase the indoor environmental air quality to LEED standards. The existing windows are the original windows when the building was constructed in 1962. They lack the ability to control heat gain and loss. The building is not insulated further increasing heat gain and loss. Additionally, the lighting throughout the building needs to be replaced with more efficient light fixtures, the fire alarm system needs to be replaced, new electric service needs to be brought into the building for the new mechanical equipment which will also require new panel boards and a new switchboard.

Fire Station #14 does not meet NFPA Standard 1500 - Standard on Fire Department Occupational Safety & Health Program, under 9.1.1. – All fire department facilities shall comply with all legally applicable health, safety, building, and fire code requirements. This building does not meet these standards because it does not meet the American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE).

The Fire Department Headquarters is the primary location for meetings and is frequented by many visitors including citizens of all physical capabilities. The Fire Chief's conference room also couples as the secondary Emergency Operations Center (EOC). Employees and visitors need to maneuver seven (7) steps to enter the building and an additional 2 flights of stairs to access the Administrative Offices. This renovation will include relocation of the entrance for access to the building and an elevator for access to the Administrative Offices. The existing restroom facilities are not ADA compliant and will also require renovation.

Fire Station 14 was built in the 1960's and since then the house has undergone major changes to operations and there have been many changes to building codes. For example, the house was not built to house female fire fighters or to any kind of energy efficient or ADA standards. For this reason, most fire stations of this era do not have the flexibility to accommodate gender separated facilities. Fire Station #14 is no exception. Ad hoc modifications provide a 154 square foot female locker room and 84 square foot female restroom. A distance of 32 feet separate the locker room and restroom. These facilities are located on the second floor, same as the administrative staff, which requires female firefighters to move about the office staff when using the shower and locker room. Current arrangements do not provide gender separated sleeping quarters. This renovation will make the female facilities comparable to the male facilities. It includes construction of adjoining restrooms and locker room. The current dormitory will be restructured with sleeping cubicles for either men or women to use.

Since 9/11, the security of fire stations is of paramount concern for the health and safety of the public. In addition, the stock of controlled substances and maintenance of expensive equipment make the fire stations ripe for burglary.

Fire Station #14 lacks an overall security system. The Administrative Offices on the second floor have a swipe card and electronic door system for entry into the offices. The existing central entrance has an electronic door system for access into the building. Other entrances to the building lack any type of security. This renovation will include the cost of installation of a security system which will include at least one (1) security camera and two (2) additional swipe cards. The City of Cincinnati is in the process of installing a security system at another facility which has a central hub with the capacity of adding additional card readers at other locations.

To date, the City of Cincinnati has expended \$10,000 for design.

B. Financial Need – See Project 1

C. Cost/Benefit

If the CFD received funding to help with the modification of Fire Station #14, it would represent a huge cost savings and benefit to the City of Cincinnati. It would provide a basic addition to the current structure, allowing female firefighters the critical need for their own facilities and sleeping quarters and it would help meet modern building code by supplying ADA accessibility. All employees working at Fire Station #14 and the Administrative Offices will benefit from a LEED certified building because one of the main goals of LEED is to improve employee comfort. In addition, the CFD will benefit in operational cost savings from the energy efficient improvements to the facility. The ADA modifications will be critical in the event a physically

challenged individual needs to gain access to the secondary Emergency Operations Center (EOC). The benefit of this cannot be calculated. The security system, as previously mentioned, will protect the health and safety of all employees and the general public.

The CFD is requesting funds to modify the existing station. The estimated project costs are: \$3.5M. The city of Cincinnati has \$1.3M to contribute to the project. It's also estimated that the modifications to the fire station would employ approximately 50 people. The estimated timeframe is 181 days or more.

All new construction and modifications will be designed and built to the latest LEED new construction standards published in 2009, the guidelines of the National Fire Chief's Association and the Guiding Principles for Sustainable New Construction and Renovations, as required in Executive Order 13423. The City of Cincinnati strives to attain LEED certification, when economically feasible, for each renovation and construction project.

#### D. Effect on Daily Operations

Fire Station #14 will continue to be available for mutual aid and is in the best position to provide this aid to locations in Northern Kentucky.

### PROJECT 6 – PURCHASE AND INSTALLATION OF GENERATORS

#### A. Project Description

The Cincinnati Fire Department (CFD) requests funding for the purchase and installation of permanent back-up generators for fire stations located throughout the City of Cincinnati. The CFD performed a needs assessment and determined the following size generators will be required to outfit all fire stations.

Qty	Size	Install Cost/Ea	Purchase Cost/Ea	Prep Cost/Ea	Total \$
4	40 KW	\$12,000	\$23,000	\$6,000	\$164,000
6	50 KW	\$12,000	\$25,000	\$6,000	\$258,000
10	60 KW	\$12,000	\$30,000	\$6,000	\$480,000
Total Cost		\$902,000			

In September 2008, Cincinnati experienced a major windstorm event that resulted in power outages that lasted for up to 1.5 weeks. The city identified the lack of generators as a major short fall in the ability to cover power needs at fire stations.

#### B. Financial Need – See Project 1

#### C. Cost/Benefit

#### D. Effect on Daily Operations

The CFD strives to meet response standards established by the National Fire Protective Association (NFPA) Statement 1710. Inability to utilize the primary means of communication delays response times and jeopardizes the safety and welfare of the public.